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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,057	03/10/2004	Keishi Shimizu	119039	4768
25944 7590 12/12/2007 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
			EXAMINER HUSON, MONICA ANNE	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 12/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,057	Applicant(s) SHIMIZU ET AL.	
	Examiner Monica A. Huson	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>031004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the paper filed 19 October 2007.

Election/Restrictions

Applicant's election without traverse of claims 1-12 in the reply filed on 19 October 2007 is acknowledged.

Claim 13 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 19 October 2007.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-6, 8-10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Horie et al. (U.S. Patent 5,138,687). Regarding Claim 1, Horie et al., hereafter "Horie," show that it is known to carry out a method for producing a polymeric optical waveguide-forming master plate (Abstract), comprising: laying a thread which does not transmit rays used for subsequent exposure on a substrate for a master plate (Figure 6a, element 12), applying a positive resist material onto the substrate for the master plate to have a thickness (Figure 6e, element 2a; it is noted that "such that, when parallel rays are vertically radiated onto the positive resist material from a side opposite to a substrate side with respect to the thread and then the positive resist material is developed, a layer made of the positive resist material is formed at whole space where the rays have not been radiated" is only intended use of the positively-recited method step); radiating parallel rays substantially vertically to the substrate for the master plate to expose the positive resist material to the rays (Figure 6f); and developing the exposed positive resist material on the substrate for the master plate to form a convex portion corresponding to a shape of an optical waveguide core (Figure 6j-6k).

Regarding Claim 2, Horie shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the positive resist material is an ultraviolet ray-curable resin and the rays used for exposure are ultraviolet rays (Column 25, lines 53-55).

Regarding Claim 4, Horie shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the substrate for the master plate has V-shaped grooves for positioning the thread (Figure 15b).

Regarding Claim 5, Horie shows the process as claimed as discussed in the rejection of Claim 1 above, including a method further comprising: electroforming at least once the substrate for the master plate having the formed convex portion (Column 43, lines 26-30).

Regarding Claim 6, Horie shows that it is known to carry out a method for producing a polymeric optical waveguide (Abstract), comprising: preparing a mold having a concave portion for forming an waveguide core, the concave portion having a cross-section which has a shape in which a semicircle or a semiellipse is combined with a rectangle (Figure 3, element 3+1; Figure 2a, 2c); bringing a clad substrate into close contact with the mold so that the concave portion faces the clad substrate (Figure 3, element 3); filling the concave portion of the mold brought into close contact with the clad substrate with a core-forming curable resin; and curing the core-forming curable resin to form a core (Figure 5, element 2a).

Regarding Claims 8, 10, and 12, Horie shows that it is known to carry out a method for producing a polymeric optical waveguide (Abstract), comprising: preparing a mold having a concave portion for forming an waveguide core, the concave portion having a cross-section which has a shape in which a semicircle or a semiellipse is combined with a rectangle (Figure 3, element 3+1; Figure 2a, 2c); bringing a clad substrate into close contact with the mold so that the concave portion faces the clad substrate (Figure 3, element 3); filling the concave portion of the mold brought into close contact with the clad substrate with a core-forming curable resin; and curing the core-forming curable resin to form a core (Figure 5, element 2a), wherein the mold is prepared by applying a mold-forming curable resin onto a polymeric optical waveguide-forming master plate produced by a method of claim 1; curing the resin; and separating the cured resin layer from the polymeric optical waveguide-forming master plate (Figures 7a-7c).

Regarding Claim 9, Horie shows the process as claimed as discussed in the rejection of Claim 6 above, including a method further comprising: separating the mold from the clad substrate with the core (Figure 7b-7c; and forming a clad layer on a surface of the clad substrate having the core (Figure 3, element 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horie. Regarding Claims 3, 7, and 11, Horie shows the process as claimed as discussed in the rejection of Claims 1, 6, , and 10, respectively, but he does not show cross sectional areas that vary longitudinally. However, configuration of a claimed element was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant (See MPEP 2144.04 (IV)(B)). Therefore, changing the cross sectional shape of the waveguide element to vary longitudinally (e.g. taper) would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to in order to produce a waveguide having particular physical features and dimensions which meet customer specifications.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Monica A Huson

December 9, 2007